

REMARKS

Upon entry of this Amendment, Claims 1, 6, 11 and 12 will be all the claims pending in the application. Claims 1, 6 and 12 have been amended by incorporating the subject matter previously recited in claim 5. Claim 5 is cancelled. No new matter is added.

Claim Rejections - 35 U.S.C. § 112

Claims 1, 5, 6, 11 and 12 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. This rejection is traversed for at the following reasons.

Applicants respectfully submit that the present specification demonstrates that the layer, on said ferromagnetic layer, having no granular structure and comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃, does have no granular structure. For example, as shown in Example 1, the ferromagnetic layer 5 in the obtained perpendicular magnetic recording disk was analyzed in detail by the use of a transmission electron microscope (TEM) and it had a granular structure. On the other hand, the stacked layer 7 being the layer above the ferromagnetic layer 5 having the granular structure was analyzed in detail by the use of the TEM and it did not have a granular structure.

Accordingly, Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. § 112.

Claim Rejections - 35 U.S.C. § 102

Claims 1, 5, 6, 11 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sakawaki et al (U.S. Patent No. 7,470,474, hereinafter “Sakawaki”). This rejection is traversed for at least the following reasons.

Claims 1, 6, and 12

Claims 1, 6, and 12 require, *inter alia*, a layer, on the ferromagnetic layer, having no granular structure and comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃. Further, Claims 1, 6, and 12 require, *inter alia*, a spacer layer

selected from a group consisting of a Pd layer and a Pt layer that is provided between said ferromagnetic layer and said layer having no granular structure and comprising the material selected from the group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃. The space layer thus contains either a layer consisting of Pd or a layer consisting of Pt. As stated in the present specification, by providing the spacer layer, the exchange coupling between the ferromagnetic layer and the layer having no granular structure is suitably controlled and thermal stability is improved.

Sakawaki

Sakawaki discloses a magnetic recording medium having a soft magnetic primary coat, an orientation-controlling layer, a perpendicularly magnetic layer, a protective layer and a lubricating coat formed sequentially in this order on a nonmagnetic substrate. *See* column 5, lines 44-54, of Sakawaki.

The perpendicularly magnetic layer of Sakawaki is composed of a magnetic layer (4a) having Co as a main component thereof, containing at least Pt as well and containing an oxide and a magnetic layer (4b) having Co as a main component thereof containing at least Cr as well and containing no oxide. *See* column 9, lines 13-21, of Sakawaki.

On pages 3-4 of the Office Action, the Examiner asserts that the magnetic layer (4b) of Sakawaki is the presently claimed layer, on the ferromagnetic layer, having no granular structure and comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃.

Applicants respectfully traverse the rejection and submit that Sakawaki does not disclose, teach or suggest a layer, on the ferromagnetic layer, having no granular structure and comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃.

Sakawaki discloses that the magnetic layer (4b) has magnetic grains, and that the magnetic grains of the magnetic layer (4b) has epitaxial growth. *See* column 11, lines 11-15, of Sakawaki. Like the magnetic layer (4a), the magnetic layer (4b) also has a granular structure. Further, Sakawaki does not mention anything about a layer, on the magnetic layer (4a), having no granular structure and comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃.

Further, Sakawaki does not disclose or suggest a spacer layer selected from a group consisting of a Pd layer and a Pt layer that is provided between said ferromagnetic layer and said layer having no granular structure and comprising the material selected from the group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt₃, and CoPd₃. The space layer thus contains either a layer consisting of Pd or a layer consisting of Pt. Even if *arguendo* the nonmagnetic layer of Sakawaki corresponds to a spacer layer, Sakawaki discloses that the nonmagnetic layer is made of multiple elements or alloys having multiple elements. Sakawaki does not disclose or suggest a nonmagnetic layer consisting of Pd or a layer consisting of Pt.

Claim 11

Claim 11 depends from claim 1, and claim 1 is patentable for the reasons discussed above. Thus, claim 11 is patentable at least by virtue of their dependency on claim 1.

Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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